

ENTERED

July 07, 2020

David J. Bradley, Clerk

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISIONSUNOCO PARTNERS MARKETING &
TERMINALS L.P.,

Plaintiff,

v.

U.S. VENTURE, INC.,

Defendant.

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CIVIL ACTION NO. H-19-1145

MEMORANDUM OPINION AND ORDER

This is a patent infringement action filed by Sunoco Partners Marketing & Terminals L.P. ("Sunoco") against U.S. Venture, Inc. ("U.S. Venture") involving United States Patent No. 9,207,686 ("the '686 Patent").¹ Sunoco and U.S. Venture disagree about the meaning of terms used in the '686 Patent and ask the court to construe the disputed terms. See Markman v. Westview Instruments, Inc., 116 S. Ct. 1348, 1387 (1996) ("[T]he construction of a patent, including terms of art within its claim, is exclusively within the province of the court.").

In support of its preferred constructions Sunoco filed Sunoco Partners Marketing & Terminals L.P.'s Opening Claim Construction

¹Complaint for Patent Infringement, Docket Entry No. 1, p. 1. All page numbers for docket entries in the record refer to the pagination inserted at the top of the page by the court's electronic filing system, CM/ECF.

Brief ("Sunoco's Opening Brief") (Docket Entry No. 40), in response to which U.S. Venture filed U.S. Venture's Responsive Claim Construction Brief ("U.S. Venture's Response") (Docket Entry No. 41), to which Sunoco replied in Sunoco Partners Marketing & Terminals L.P.'s Reply Claim Construction Brief ("Sunoco's Reply") (Docket Entry No. 42). The parties have also filed their P.R. 4-3 Joint Claim Construction and Prehearing Statement (Docket Entry No. 37). A Markman Hearing was held on June 24, 2020.²

The parties dispute the proper construction of the following claim terms: (1) "said agent vapor pressure," (2) "calculating," and (3) the phrase "calculating a blend ratio based upon a blended petroleum vapor pressure, said agent vapor pressure, said flow rate and said allowable vapor pressure." After carefully considering the parties' arguments, the evidence, and the applicable law, the court will construe the disputed terms as stated below.

I. Legal Standard for Claim Construction

In Markman, 116 S. Ct. at 1387, the United States Supreme Court held that the construction of patent claims is a matter of law exclusively for the court. Accordingly, when the parties dispute the meaning of particular claim terms, the court should consider the parties' proposed definitions, but must independently assess the claims, the specification, and if necessary the

²Hearing Minutes and Order, Docket Entry No. 50.

prosecution history and relevant extrinsic evidence, and declare the meaning of the disputed terms. Exxon Chemical Patents, Inc. v. Lubrizol Corp., 64 F.3d 1553, 1556 (Fed. Cir. 1995), cert. denied, 116 S. Ct. 2554 (1996).

Courts begin claim construction inquiries by ascertaining the "ordinary and customary meaning" of disputed claim terms. Phillips v. AWH Corporation, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc), cert. denied, 126 S. Ct. 1332 (2006) (quoting Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996)). "[T]he ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." Id. at 1313. "[T]he person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification." Id.

In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words. . . . In such circumstances, general purpose dictionaries may be helpful. In many cases that give rise to litigation, however, determining the ordinary and customary meaning of the claim requires examination of terms that have a particular meaning in a field of art. Because the meaning of a claim term as understood by persons of skill in the art is often not immediately apparent, and because patentees frequently use terms

idiosyncratically, the court looks to "those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean." . . . Those sources include "the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art."

Id. at 1314 (citations omitted).

Two exceptions exist to the general rule that terms carry their ordinary and customary meaning. First, a term may not carry its ordinary and customary meaning "if the patentee acted as his own lexicographer and clearly set forth a definition of the disputed claim term in either the specification or prosecution history." CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed. Cir. 2002); see also Hormone Research Foundation, Inc. v. Genentech, Inc., 904 F.2d 1558, 1563 (Fed. Cir. 1990), cert. denied, 111 S. Ct. 1434 (1991) ("It is a well-established axiom in patent law that a patentee is free to be his or her own lexicographer . . . and thus may use terms in a manner contrary to or inconsistent with one or more of their ordinary meanings."). Second, a claim term may also be interpreted more narrowly than it otherwise would if "the patentee distinguished that term from prior art on the basis of a particular embodiment, expressly disclaimed subject matter, or described a particular embodiment as important to the invention." CCS Fitness, 288 F.3d at 1366-67.

"[A] patentee need not describe in the specification every conceivable and possible future embodiment of his invention." Id.

at 1366 (internal quotation marks and citation omitted). Nor will the court "add a narrowing modifier before an otherwise general term that stands unmodified in a claim." Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1249 (Fed. Cir. 1998). "If an apparatus claim recites a general structure without limiting that structure to a specific subset of structures, [the court] will generally construe the term to cover all known types of that structure that the patent disclosure supports." CCS Fitness, 288 F.3d at 1366 (internal quotation marks and citation omitted).

There are two types of evidence that courts rely on in conducting claim construction inquiries: (1) intrinsic evidence (e.g., the language of the claim itself, the patent specification, and the prosecution history of the patent) and (2) extrinsic evidence (evidence external to the patent and prosecution history like dictionaries, treatises, and expert and inventor testimony). Phillips, 415 F.3d at 1317 (citing Vitronics, 90 F.3d at 1583). The court is not required to address these sources in any particular order; "what matters is for the court to attach the appropriate weight to be assigned to those sources in light of the statutes and policies that inform patent law." Id. at 1324.

A. Intrinsic Evidence

The language of the claim itself is "'of primary importance, in the effort to ascertain precisely what it is that is patented.'"

Phillips, 415 F.3d at 1312 (quoting Merrill v. Yeomans, 94 U.S. 568, 570 (1876)). This is "[b]ecause the patentee is required to 'define precisely what his invention is.'" Id. (quoting White v. Dunbar, 7 S. Ct. 72, 75 (1886)). Courts, therefore, carefully consider the context within which a particular term is used in an asserted claim, as well as how the term is used in other claims within the same patent. Id. at 1314. As a general rule, an ordinary English word "whose meaning is clear and unquestionable" needs no further construction. See Chef America, Inc. v. Lamb-Weston, Inc., 358 F.3d 1371, 1373 (Fed. Cir. 2004).

While the claim language itself should be the court's primary focus, other intrinsic sources can be helpful. For example, the specification "is always highly relevant to the claim construction analysis" and can be either dispositive or "the single best guide to the meaning of a disputed term." Phillips, 415 F.3d at 1315 (quoting Vitronics, 90 F.3d at 1582) (internal quotations omitted); see also CVI/Beta Ventures, Inc. v. Tura LP, 112 F.3d 1146, 1153 (Fed. Cir. 1997) ("[T]he patent drawings are highly relevant in construing the . . . limitations of the claims."). While "[i]t is therefore entirely appropriate for a court, when conducting claim construction, to rely heavily on the [specification] for guidance as to the meaning of the claims," Phillips, 415 F.3d at 1317, it is important that the specification be used only to interpret the meaning of a claim, not to confine patent claims to the embodiments

described therein. See Dow Chemical Co. v. United States, 226 F.3d 1334, 1342 (Fed. Cir. 2000) ("[A]s a general rule claims of a patent are not limited to the preferred embodiment . . . or to the examples listed within the patent specification.").

The patent's prosecution history should also be considered when offered for purposes of claim construction. Phillips, 415 F.3d at 1317. The prosecution history "consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent." Id. "[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." Id. However, because "the prosecution history represents an ongoing negotiation between the PTO and the applicant, . . . it often lacks the clarity of the specification and thus is less useful for claim construction purposes." Id.

B. Extrinsic Evidence

If intrinsic evidence does not resolve the ambiguity in a particular claim term, the court may look to extrinsic evidence to help it reach a conclusion as to the term's meaning. See Phillips, 415 F.3d at 1317; Vitronics, 90 F.3d at 1583. The court may look to dictionaries "if the court deems it helpful in determining 'the

true meaning of language used in the patent claims.'" Phillips, 415 F.3d at 1318 (quoting Markman, 52 F.3d at 980). However, the court must be mindful that extrinsic evidence may only supplement or clarify -- not displace or contradict -- the intrinsic evidence. See id. at 1319 ("[E]xtrinsic evidence may be useful to the court, but it is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence."). "[H]eavy reliance on the dictionary divorced from the intrinsic evidence risks transforming the meaning of the claim term to the artisan into the meaning of the term in the abstract, out of its particular context, which is the specification." Id. at 1321.

II. Construction of Disputed Terms

The '686 Patent describes a system and method for blending butane and similar agents into gasoline streams.³ Relevant to this dispute, the '686 Patent claims priority to and incorporates by reference U.S. Patent No. 6,679,302 ("the '302 Patent").⁴ The parties dispute the construction of terms in Claim 16 of the '686 Patent, which claims in relevant part:

16. A method for in-line blending of petroleum and a volatility modifying agent comprising:
 - a) providing a petroleum stream that comprises a petroleum vapor pressure and a flow rate;

³'686 Patent, Exhibit 1 to U.S. Venture's Technical Tutorial, Docket Entry No. 38-1, p. 2.

⁴Id. at 9 col. 1 lns. 7-18.

- b) providing an agent stream that comprises an agent vapor pressure;
- c) providing an allowable vapor pressure; [and]
- d) calculating a blend ratio based upon a blended petroleum vapor pressure, said agent vapor pressure, said flow rate and said allowable vapor pressure[.]⁵

The parties dispute the construction of the terms "said agent vapor pressure" and "calculating." Neither party argues that either "said agent vapor pressure" or "calculating" has a particular meaning in the relevant field of art. Sunoco argues that "said agent vapor pressure" and "calculating" are terms that should be given their plain and ordinary meaning and require no further construction. U.S. Venture argues that further construction of these terms is required to assist the jury in evaluating the scope of the technology claimed in the '686 Patent.

The parties also dispute the construction of the entire phrase "calculating a blend ratio based upon a blended petroleum vapor pressure, said agent vapor pressure, said flow rate and said allowable vapor pressure," but agreed during the Markman Hearing that construction of that phrase hinges on the court's construction of the terms "said agent vapor pressure" and "calculating."

⁵Disputed Terms, Exhibit A to P.R. 4-5 Joint Claim Construction Chart, Docket Entry No. 46-1, p. 2; '686 Patent, Exhibit 1 to U.S. Venture's Technical Tutorial, Docket Entry No. 38-1, p. 17 col. 18 lns. 21-30.

A. Construction of "Said Agent Vapor Pressure"

Disputed Term	Sunoco's Construction	U.S. Venture's Construction
"said agent vapor pressure"	Plain and ordinary meaning	"The actual vapor pressure of the agent that is blended with the petroleum"

The invention claimed in Claim 16 is "[a] method for in-line blending of petroleum and a volatility modifying agent" that comprises "providing an agent stream that comprises an agent vapor pressure" and "calculating a blend ratio based upon . . . said agent vapor pressure" and other variables.⁶ U.S. Venture argues that its construction is necessary because the claim must be construed to mean that the method requires that the user obtain "said agent vapor pressure" by measuring the agent stream, as opposed to using a hypothetical or assumed value.⁷ Sunoco argues that the plain and ordinary meaning does not require further construction.⁸ Neither Sunoco nor U.S. Venture argues that "said agent vapor pressure" has a special meaning different from its plain and ordinary meaning to persons of ordinary skill in the art.

The court is persuaded by Sunoco's argument that nothing in the language of Claim 16, the '686 Patent as a whole, or the '302 Patent requires that the said agent vapor pressure referenced in

⁶Id.

⁷U.S. Venture's Response, Docket Entry No. 41, p. 7.

⁸Sunoco's Opening Brief, Docket Entry No. 40, p. 6.

Claim 16 be actually measured from the agent stream. The language and construction of Claim 16 suggests that the "said agent vapor pressure" is simply a variable to be used to calculate the blend ratio.⁹ The term "said agent vapor pressure" identifies that variable, but does not specify how the user of the method should determine its value. The word "said" refers back to the earlier use of "agent vapor pressure," where the claim states that the method comprises "b) providing an agent stream that comprises an agent vapor pressure."¹⁰ This earlier instance only states that the agent stream comprises an agent vapor pressure; it does not specify that the user of the method should measure the stream to learn the actual value of the vapor pressure. Accordingly, the plain language of the claim does not support U.S. Venture's argument that "said agent vapor pressure" necessarily excludes circumstances where the user of the method knows or assumes the agent vapor pressure instead of measuring it.

A comparison with Claim 1 in the '686 Patent also shows that the drafters did not intend to require measurement in Claim 16. See Phillips, 415 F.3d at 1314 ("Differences among claims can also be a useful guide in understanding the meaning of particular claim terms."). Claim 1 states that one using the method should "calculat[e] a blend ratio" using the gasoline vapor pressure after

⁹'686 Patent, Exhibit 1 to U.S. Venture's Technical Tutorial, Docket Entry No. 38-1, p. 17 col. 2 lns. 28-30 (listing the "said agent vapor pressure" as one of the things the calculation of the blend ratio must be "based upon").

¹⁰Id. col. 2 lns. 25-26.

"periodically determining said gasoline vapor pressure."¹¹ Claim 1 specifically requires a user to determine the vapor pressure and Claim 16 does not -- showing that Claim 16 does not include such a limitation. U.S. Venture argues that this portion of Claim 1 only specifies that the determination must be periodic, while in Claim 16 the implied determination may occur only once. This argument is not persuasive because it does not explain why the drafters omitted the entire step of "determining said . . . pressure" instead of simply omitting the term "periodically" if they intended that step to be an included limitation in Claim 16.

U.S. Venture also argues that the '302 Patent is intrinsic evidence that supports its construction. U.S. Venture cites the '302 Patent's description of preferred embodiments, which states that "[t]o calculate the blend ratio one must first have knowledge of the respective vapor pressures . . . [they are] preferably measured directly."¹² But this language suggests that direct measurement, while preferred, is not the only way to gain knowledge of the vapor pressures in order to calculate blend ratios. That direct measurement is described as the preferred embodiment in the

¹¹Id. at 16 col. 16 lns. 5-9.

¹²See '302 Patent, Exhibit 2 to U.S. Venture's Technical Tutorial, Docket Entry No. 38-2, p. 11 col. 7 lns. 15-16 and 24-25 (emphasis added). The '302 patent refers here specifically to butane, which is a typical "agent" referred to in Claim 16 of the '686 Patent. '686 Patent, Exhibit 1 to U.S. Venture's Technical Tutorial, Docket Entry No. 38-1, p. 9 col. 1 lns. 51-53 ("[G]asoline marketers blend agents such as butane with gasoline to increase the Reid vapor pressure and volatility of the gasoline.").

'302 Patent does not imply a limitation in Claim 16 that direct measurement is necessary.

Because U.S. Venture's proposed construction asks the court to import limitations onto a term that is not ambiguous and for which there is no evidence that it should be limited beyond its plain and ordinary meaning, the court concludes the term should be construed only as having its plain and ordinary meaning.

B. Construction of "Calculating"

Disputed Term	Sunoco's Construction	U.S. Venture's Construction
"calculating"	Plain and ordinary meaning	"Determining using a mathematical process"

"Calculating" is an ordinary English word without a particular meaning to persons having ordinary skill in the art. Sunoco argues that the court need not construe this term. U.S. Venture argues that the intrinsic evidence and plain language of the term requires the court to construe the term to specifically require "a mathematical process."

U.S. Venture cites a number of cases where courts in construing other patents have defined calculating as requiring a mathematical process. But "[a] particular term used in one patent need not have the same meaning when used in an entirely separate patent, particularly one involving different technology." Medrad, Inc. v. MRI Devices Corp., 401 F.3d 1313, 1318 (Fed. Cir. 2005).

U.S. Venture argues that its proposed construction is supported by dictionary definitions of the verb "calculate."¹³ Those dictionary definitions include "determine by mechanical process" as the first definition for the verb.¹⁴ If calculating something necessarily means "determining by mathematical process" as defined by common dictionaries, then no further construction of "calculating" is required to assist the trier of fact. Moreover, the dictionaries do not strictly support U.S. Venture's construction because they also provide additional definitions for the term such as "to determine by reasoning or practical experience."¹⁵ U.S. Venture's argument that the court must specifically construe "calculating" in order to distinguish it from the term "determining" is likewise not persuasive because U.S. Venture does not explain why the trier of fact cannot intuit the

¹³U.S. Venture's Response, Docket Entry No. 41.

¹⁴See Webster's American Dictionary College Edition, Exhibit 1 to Sunoco's Opening Brief, Docket Entry No. 40-2, p. 4 (giving the first definition of "calculate" as "to determine or ascertain by mathematical methods; compute"); Merriam Webster's Collegiate Dictionary 10th ed., Exhibit 2 to Sunoco's Opening Brief, Docket Entry No. 40-3, p. 4 (giving the first definition of calculate as "to determine by mathematical process").

¹⁵Webster's American Dictionary College Edition, Exhibit 1 to Sunoco's Opening Brief, Docket Entry No. 40-2, p. 4 (providing additional definitions "to determine by reasoning or practical experience" and "to make suitable or fit for a purpose"); Merriam Webster's Collegiate Dictionary 10th ed., Exhibit 2 to Sunoco's Opening Brief, Docket Entry No. 40-3, p. 4 (providing additional definitions "to reckon by exercise of practical judgment" and "to solve or probe the meaning of").

difference between those terms based on their plain and ordinary meanings. The court is persuaded that further construction of the term "calculating" is not required.

C. Construction of the Combined Phrase

Disputed Term	Sunoco's Construction	U.S. Venture's Construction
<u>calculating</u> a blend ratio based upon a blended petroleum vapor pressure, <u>said agent vapor pressure</u> , said flow rate and said allowable vapor pressure	Plain and ordinary meaning	"Determining a blend ratio using a mathematical process that uses at least the following four values in the mathematical formula: (1) the blended petroleum vapor pressure, (2) the agent vapor pressure, (3) the petroleum flow rate, and (4) the allowable vapor pressure"

U.S. Venture argues that the court should construe the entire phrase "calculating a blend ratio based upon a blended petroleum vapor pressure, said agent vapor pressure, said flow rate and said allowable vapor pressure" to make clear to the trier of fact that the claim requires a mathematical formula that uses the blended petroleum vapor pressure, agent vapor pressure, flow rate, and allowable vapor pressure to determine the blend ratio.¹⁶ U.S. Venture's proposed construction, however, is premised on the assumption that the court will construe "calculating" to

¹⁶U.S. Venture's Response, Docket Entry No. 41, pp. 14-15.

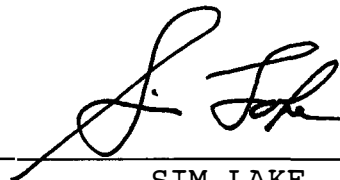
specifically require a mathematical process. At the Markman Hearing, the parties agreed that the court's construction of the phrase would be controlled by the construction of the terms "said agent vapor pressure" and "calculating." Because the court has concluded that "calculating" should not be construed beyond its plain and ordinary meaning, the court concludes that additional construction of the phrase is likewise not warranted.

III. Order

For the reasons stated above, the court adopts the following constructions for the disputed terms of Claim 16 of the '686 Patent:

Disputed Term	Construction
"said agent vapor pressure"	plain and ordinary meaning
"calculating"	plain and ordinary meaning
"calculating a blend ratio based upon a blended petroleum vapor pressure, said agent vapor pressure, said flow rate and said allowable vapor pressure"	plain and ordinary meaning

SIGNED at Houston, Texas, on this the 7th day of July, 2020.



SIM LAKE
SENIOR UNITED STATES DISTRICT JUDGE